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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/865,247	05/25/2001	Patrick McWilliams	SSD-0041C	3965
29116	7590	01/25/2005	EXAMINER	
ROBINSON & POST, L.L.P. NORTH DALLAS BANK TOWER, SUITE 575 12900 PRESTON ROAD, LB-41 DALLAS, TX 75230			TON, ANTHONY T	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/865,247

Applicant(s)

MCWILLIAMS, PATRICK

Examiner

Anthony T Ton

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3-6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.


**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 10/1/01.
- 4) ☐ Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

PHIRIN SAM  
 PRIMARY EXAMINER

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

a) The reference “100” labeled for the UTOPIA-LVDS Bridge 100 cannot be found in **Figs.3** and **5**.

b) The reference “160” in **Fig.5** cannot be found in the description of the Applicant’s specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Abstract*

2. The abstract is objected to because of the following informalities:

Term “PHY Layer 14” in line 5 and line 6 is improper since in OSI, PHY Layer is belonging to Layer 1.

Examiner suggests changing this term to “PHY Layer 1”.

*Specification*

3. The disclosure is objected to because of the following informalities:

a) Term “connecting **two** ATM devices” in page 3, line 14 is improper.

Examiner suggests changing this term to “connecting **to** ATM devices”.

b) Term “PHY Layer **14**” in page 4, line 13, and all subsequences in the Applicant’s specification is improper since in OSI, PHY Layer is belonging to Layer 1.

If the Applicant refers to “PHY Layer 14 devices” as indicated in Figs. 1-2, the word “device(s)” should be followed the term “PHY Layer 14” to be clearly distinguished a difference between such a device and the Physical Layer 1.

Examiner suggests changing this term to “PHY Layer **1**”.

**Note:** the change should be made for all of the terms “PHY Layer 14” in the Applicant’s specification.

b) Term “ATM Layer **12**” in page 5, line 7, and all subsequences in the Applicant’s specification is improper since in OSI, ATM Layer is belonging to Layer 2.

If the Applicant refers to “ATM Layer 12 devices or interfaces” as indicated in Figs. 1-2, the word “device(s)” or “interface(s)” should be followed the term “ATM Layer 12” to be clearly distinguished a difference between such a device(s) or an interface(s) and the ATM Layer 2.

Examiner suggests changing this term to “ATM Layer **2**”.

**Note:** the change should be made for all of the terms “ATM Layer 2” in the Applicant’s specification.

c) Term “**58** conductors” in page 18, line 4 is not associated with 52 conductors as shown in Figure 2a.

Examiner suggests changing this term to “**52** conductors”.

d) Term “LVDS bus **123**” in page 19, line 20 is not associated with “bus 125” as shown in Fig.3.

Examiner suggests changing this term to “LVDS bus **125**”.

e) Term “**resister** file” in page 20, line 10 is misspelled.

Examiner suggests changing this term to “**register** file”.

f) Term “Referring to Figure **7**” in page 22, line 17 is not associated with descriptions as shown in Fig.6.

Examiner suggests changing this term to “Referring to Figure **6**”.

g) Term “**call** header” in page 24, line 2 is improper and not associated with Fig.8.

Examiner suggests changing this term to “**cell** header”.

h) Term “**is** embedded” in page 26, line 8 is improper since it does not incorporate with a plural subject.

Examiner suggests changing this term to “**are** embedded”.

Appropriate correction is required.

### ***Claim Objections***

4. **Claims 1, 3 and 4** are objected to because of the following informalities:

#### **In Claim 1:**

a) Term “**programing**” in line 2 is misspelled.

Examiner suggests changing this term to “**programming**”.

b) Limitation “**the** first device layers” in line 5 is lack of antecedent basic.

Examiner suggests changing this limitation to “**first** device layers”.

c) Limitation “**the** second device layers” in line 7 is lack of antecedent basic.

Examiner suggests changing this limitation to “second device layers”.

e) Limitation “**the** established protocol cell” in line 15 is lack of antecedent basic.

Examiner suggests changing this limitation to “established protocol cell”.

**In Claim 3:**

Term “the number of **f** bits” in line 3 is improper for word “**f**”.

Examiner suggests changing this term to “the number of bits”.

**In Claim 4:**

Term “the **al** least” in line 4 is misspelled for word “**at**”.

Examiner suggests changing this term to “the **at** least”.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claim 1** is rejected under 35 U.S.C. 103(a) as being unpatentable over *Rich* (US Patent No. **6,452,927**) in view of *Bottorff et al.* (US Patent Application Pub No. **2001/0014104**) hereinafter referred to as *Bottorff*.

**In Regarding to Claim 1:** *Rich* disclosed a protocol to serial link bridge (*see Fig.2: 206*) comprising:

an established protocol interface (*see Fig.2: 208*) and the protocol to serial link bridge further comprises;

means for programming the established protocol interface to first mode of operation and a second mode of operation (*see Fig.3: 338 and 342*), the established protocol interface includes a means for transferring established protocol cells between the protocol to serial link bridge and the first device layers when in the first mode of operation (*see Fig.3: 334, 332 and 326*) and for transferring the established protocol cells between the protocol to serial link bridge and the second device layers when in the second mode of operation (*see Fig.3: 336, 338 and 334*);

a serial interface (*see Fig.2: 210*);

a down bridge direction and an up bridge direction (*see Fig.2: 216 and 218, respectively*) and in the up bridge direction the protocol to serial link bridge includes;

a means for receiving a frame of a plurality of transport containers (*see Fig.9: 912 and 914*) including a means for detecting a marking in a predefined transport container of the frame of transport containers (*see Fig.9: 906, 908 and 910*);

a means for converting the transport container to the established protocol cell (*see col.9 lines 54-62*), the means being operatively connected to the established protocol interface and to the means for receiving (*see Fig.3: 334 and 336*);

means for applying the established protocol cell to the established protocol interface, the means for applying being operatively connected to the means for converting and to the established protocol interface (*see Fig.3: 332*).

*Rich* fails to explicitly disclose transport containers including a means for checking an error code of at least a first portion of each transport container.

*Bottorff* explicitly disclosed such transport containers including a means for checking an error code of at least a first portion of each transport container (*see Figs.5 and 6: Paras. [0043] - [0045]: wherein, Bottorff discloses Header Error Code (HEC) contained in the first portion of a packet in synchronization container 60).*

At the time of the invention, it would be obvious to a person of ordinary skill in the art to implement such transport containers including a means for checking an error code of at least a first portion of each transport container, as taught by *Bottorff* with *Rich*, in order to minimize errors in packets contained in a container. The motivation for doing so would have been to enhance reliability and efficiency for communications data and information transported between the physical layer and ATM layer in a communications network. Therefore, it would have been obvious to combine *Bottorff* with *Rich* in the invention as specified in the claim.

7. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over *Rich* (US Patent No. 6,452,927) in view of *Bottorff et al.* (US Patent Application Pub No. 2001/0014104) as applied to claim 1 above, and further in view of *Livermore et al.* (US Patent No. 6,542,511) hereinafter referred to as *Livermore*.

**In Regarding to Claim 2:** *Rich* disclosed all aspects of this claim as set forth in claim 1.

*Rich* fails to explicitly disclose the frame being composed of N blocks of transport containers where N is a positive number with each block including M transport containers where M is a positive number and each transport container includes at least one control byte, and the means for receiving the transport containers includes a means for sequentially receiving a first transport container of a first block through a last transport container of a last block.



*Livermore* explicitly disclosed such a frame being composed of N blocks of transport containers where N is a positive number with each block including M transport containers where M is a positive number and each transport container includes at least one control byte, and the means for receiving the transport containers includes a means for sequentially receiving a first transport container of a first block through a last transport container of a last block (see Fig. 15: M containers, wherein M=256; and col. 6 lines 26-51: it needs not limit the contents of a container to an integer number of data transaction units).

At the time of the invention, it would be obvious to a person of ordinary skill in the art to implement such a frame being composed of N blocks of transport containers where N is a positive number with each block including M transport containers where M is a positive number and each transport container includes at least one control byte, and the means for receiving the transport containers includes a means for sequentially receiving a first transport container of a first block through a last transport container of a last block, for a purpose of composing of a flexible frame for transport. The motivation for doing so would have been to improve performances and properly control communications data and information transported between the physical layer and ATM layer in a communications network. Therefore, it would have been obvious to combine *Livermore* with *Rich* in the invention as specified in the claim.

#### ***Allowable Subject Matter***

8. **Claims 3-6** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Examiner Information***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Anthony T Ton** whose telephone number is **571-272-3076**. The examiner can normally be reached on M-F: 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chau Nguyen** can be reached on **571-272-3126**. The fax phone number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully submitted,

by: *AT*  
Anthony T. Ton  
Patent Examiner  
January 21, 2005

  
**PHIRIN SAM  
PRIMARY EXAMINER**